

CLAIMS:

1. A luminescent body comprising an optical waveguide plate (1), a UV light source (2), and means for coupling the UV light into the optical waveguide plate, characterized in that the optical waveguide plate is provided with a covering layer 3 that contains one or more phosphors that are either applied directly or may be embedded in spherical particles of synthetic resin material and that convert UV light of a wavelength from 300 to 400 nm into visible light of a wavelength from 420 to 480 nm, the particles of synthetic resin material having a diameter of between 10 and 500 nm and exhibiting a light reflection of < 20%.
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2. A luminescent body as claimed in claim 1, characterized in that the covering layer contains one or more inorganic phosphors that may be embedded in spherical particles of synthetic resin material.
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3. A luminescent body as claimed in claim 1, characterized in that the covering layer contains one or more organic phosphors that may be embedded in spherical particles of synthetic resin material.
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4. A luminescent body as claimed in claims 1 to 3, characterized in that the phosphors, which may be embedded in the spherical particles of synthetic resin material, convert the UV light that is put into colored or white light.
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5. A luminescent body as claimed in claims 1 to 4, characterized in that the covering layer applied to the optical waveguide plate produces a layer thickness of 20 to 5000 nm.
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6. A luminescent body as claimed in claims 1 to 5, characterized in that a fluorescent tube is used as a primary light source.

7. A luminescent body as claimed in claims 1 to 5, characterized in that an arrangement of $\text{Al}_x\text{Ga}_y\text{In}_z\text{N}$ LEDs in which x, y and z may assume values between 0 and 1 and the sum of $x+y+z$ is 1 is used as a primary light source.
- 5 8. A luminescent body as claimed in claims 1 to 7, characterized in that the covering layer containing the spherical particles of synthetic resin material is applied to a film that is placed between two or more optical waveguide plates.
9. Use of a luminescent body as claimed in claims 1 to 8, characterized in that it
10 is used to illuminate an automobile roof lining.
10. Use of the luminescent body claimed in claims 1 to 8, characterized in that it is used to illuminate a window.